Chickens died usually three to four days after inoculation. (Wilm.) Are refractory according to Ogata.

Sparrows: One died after seventy-two hours. (Nuttall.)

Adders (*Pelius borus*): At 26° to 28° C. died of plague after forty-three hours. A control animal remained alive at this temperature, and was quite alert after two weeks. (Nuttall.)

Lizards (*Lacerta agilis*): At 21° to 26° C. one died of plague after thirty-six hours. Another remained alive for a week.

Swine: Lawson inoculated and fed swine with plague organs from man. They had fever, but recovered. (Lancet, July 27, 1895.) Wilm saw a hog die twenty-two days after feeding with human plague spleen. Ogata stated that swine died some days after inoculation.

Horses: I have never known a horse to die after inoculation, but the following shows that the horse may be receptive to plague: An entire gelatine culture, which had killed house mice in two days, was intravenously injected. A violent fever ensued, which lasted one week. Cure followed. (Yersin, Calmette, and Borrel, Annals of Pasteur Institute, Vol. IX, 1895, p. 594.) A quarter culture, subcutaneously injected, induced violent fever for forty-eight to sixty hours, with large tumor on spot of inoculation, which developed into an abscess.

When not otherwise stated, the animals were subcutaneously inoculated. I could not keep moles alive long enough to test their immunity. They do not bear captivity. In short, it appears that during plague epidemics in various countries the death of rats, mice, swine, cats, dogs, cattle (viz, buffalo, goats, horses, and mules), snakes, chickens, and birds has been observed and reported. By bacteriological examination it has been shown that rats and mice contract plague and die. It has been shown that plague may be experimentally induced, with fatal results, by feeding or inoculating with plague matter rats, white mice, house mice, field mice, wood mice, guinea pigs, rabbits, swine, monkeys, cats, chickens, sparrows, and flies. Pigeons, hedgehogs, and frogs are immune. Lizards and snakes are receptive at high temperatures, but are otherwise immune. Experiment with dogs and cattle is negative.

Further investigation in this field should prove interesting, if we consider the results obtained by Yersin, Calmette, and Borrel. These writers find that by inoculation of the same species of plague bacillus from animal to animal a definite degree of virulence is obtained. "The microbe which kills the mouse in two days, when it is carried through the rabbit, requires, in its first transition, considerable time to cause the death of that animal. After several passages it kills the rabbit regularly in three days, but it has then lost its virulence for mice, and some passages from mouse to mouse are needed to restore it."

BERLIN, *July 15, 1897.*

BRAZIL.

Sanitary report from Rio.

RIO DE JANEIRO, *July 19, 1897.*

SIR: I have the honor to transmit report for the week ended July 17, 1897:

There were 12 deaths from accesso pernicioso, an increase of 9; 2 from yellow fever, none in the foregoing week; 1 from beriberi, a decrease of 4; 1 from enteric fever, the same as in the foregoing week; 3 from measles, an increase of 2; 47 from tuberculosis, an increase of 9, and 273 from all causes, an increase of 5.

Smallpox in Para.—A telegram from Para this morning states that smallpox is prevalent there in epidemic form.

The health of this town continues good.

Since last report the following-named ships have been inspected or received bills of health from this office: July 13, ship *Deccan*, British, for New York. July 15, bark *Julius*, Portuguese, for Pensacola, and steamship *Hathor*, British, for St. Lucia, West Indies. July 16, steamship *Netherfield*, British, for Hampton Roads, Va.; bark *Lerak*, British, for Delaware Breakwater, and bark *Venturoso*, Portuguese, for Philadel-

phia. July 17, steamship *Galileo*, Belgian, for New York, and bark *Avenire*, Italian, for Pensacola.

Respectfully, yours,

R. CLEARY, M. D.,
Sanitary Inspector, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine Hospital Service.

Sanitary report from Rio—Sanarelli's discovery of the yellow fever bacillus confirmed by the National Academy of Medicine at Rio.

RIO DE JANEIRO, *July 26, 1897.*

SIR: I have the honor to transmit report for the week ended July 24, 1897:

There was 1 death from accesso pernicioso, a decrease of 11; 1 from yellow fever, none in the foregoing week; 1 from beriberi, the same as in the foregoing week; 6 from enteric fever, an increase of 5; 1 from whooping cough, none in the foregoing week; 2 from measles, a decrease of 1; 54 from tuberculosis, an increase of 7; and 283 from all causes, an increase of 10.

The health of the town is as good as it ever is.

Sanarelli's microbe.—The National Academy of Medicine confirmed the discovery of Sanarelli of the yellow fever bacillus on the 23d of this month, basing its opinion on the full reports of the bacteriologists, Drs. Fajarda and Lacerda, made in the bacteriological laboratory of the army, with the assistance of Dr. Miguel Conto, and by permission of the director, Dr. Ismael da Rocha.

Smallpox is again reported as epidemic in Para.

Since last report the following-named ships have been inspected or received bills of health from this office: July 19, steamship *Grecian Prince*, British, from Santos for New York. July 20, steamship *Bendi*, British, for St. Lucia, West Indies. July 21, steamship *Benrath*, British, for St. Lucia, West Indies. July 24, steam bark *Severn*, British, for Baltimore, Md.; bark *Carl Hemdret*, Swede, for Sabine Pass, Tex., and steamship *Cuvier*, British, for New York from Santos. July 26, bark *Eikundasund*, Norwegian, for Pensacola, Fla., and bark *George Thompson*, British, for Brunswick, Ga.

Respectfully, yours,

R. CLEARY, M. D.,
Sanitary Inspector, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

CANADA.

Smallpox in Montreal.

MONTREAL, *August 18, 1897.*

The present status of smallpox in this province is as follows:

Municipality.	Date of outbreak.	New cases since last report.	Total cases since outbreak.	Died.	Still sick.	Houses infected since outbreak.	Houses still infected.
Montreal City*.....	July 2	†3	10	4	6	7	‡0
Westmount (Hochelaga Co.)‖	July 26	0	4	1	3	1	‡0

* Population, 240,000.
† One doubtful case in a new house.
‡ Except the isolation hospital.
‖ Population, 6,000.

Yours, respectfully,

ELZÉAR PELLETIER,
Secretary Board of Health of the Province of Quebec.